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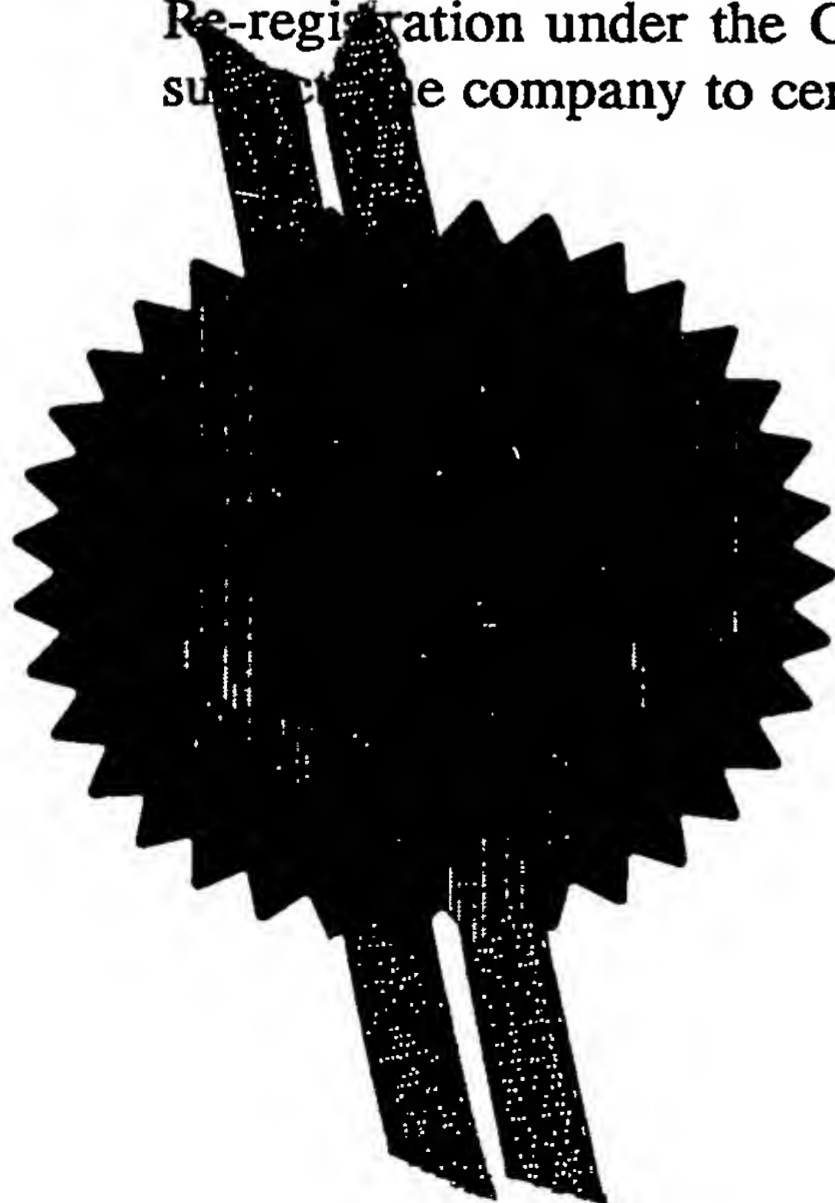
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Stephen Hordley

Dated 14 September 2004





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05AUG03 E827693-1 B10549
P01/7700 0.00-0318222.7

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The Patent Office

Cardiff Road
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South Wales
NP10 8QQ

1. Your reference

04 AUG 2003

0318222.7

2. Patent application number

(The Patent Office will fill in this part)

3. Full name, address and postcode of the or of each applicant (underline all surnames)

MR. CHETTAN KARSA
85, RUGBY AVENUE,
SUDBURY TOWN,
WEMBLEY, MIDD.
HA0 3DP

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

8613507001

4. Title of the invention

PIVOTING CASE CONTAINER

5. Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

85 RUGBY AVENUE
SUDBURY TOWN
WEMBLEY
MIDD. HA0 3DP

Patents ADP number (if you know it)

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number
(if you know it)

Date of filing
(day / month / year)

7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing
(day / month / year)

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

- a) any applicant named in part 3 is not an inventor, or
 - b) there is an inventor who is not named as an applicant, or
 - c) any named applicant is a corporate body.
- See note (d))

NO
5/7/04

Patents Form 1/77

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Continuation sheets of this form 0

Description 3

Claim(s) 0

Abstract 0

Drawing(s) 23+3

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

Any other documents (please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature



Date 31/7/03

12. Name and daytime telephone number of person to contact in the United Kingdom

CHETTAN KARAN

0208 635 1172

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PIVOTING CASE CONTAINER

This invention relates to a container which provides the robust storage of any product that fits within the container envelope requiring only a single handed operation to open it. A list of typical uses may be to store cigarettes, sweets, credit cards, money, mobile devices and other personal items.

Conventional lid and case containers whether hinged or separable, open and close in most cases requiring both hands.

The object of this invention is to provide a means of storing items in a robust container where potential risk of damage is minimised. And to provide the user a single handed operation for opening, which would allow one hand to remain free for any other purpose.

The invention consists of a case, a lid, and a base. The closed end of the case is mounted to the base by means of a pair of cylindrical pivot lugs assembled co-axially within the corresponding circular holes in the base. The open end of the case has a boss parallel to the edge of the case with a concentric, cylindrical hole for which the lid with a corresponding cylindrical pin would be assembled co-axially with the hole in the boss. This provides a hinge interconnecting the case and lid and providing a second pivot point. The closed end of the lid is mounted by means of a pair of cylindrical lugs inserted into a corresponding pair of slots in the base these lugs are free to slide within the slot length. There are also two protruding lugs on each side of the case which when the case is closed, has a latching effect on the assembly. There is a cut-out through the base so in the closed state, the case may be pushed from the underside to provide the opening force.

For aesthetic purposes, the present invention may hide the slot and hole features on the base by means of trimming pieces on the external faces of the base which could be adapted to provide clip retaining features.

The present invention will preferably made from a plastic material but could wholly or partly be produced from materials such as card, wood, metal, ceramic or rubber.

A specific embodiment of the present invention will now be described by way of the example with reference to the following drawings in which:-

Figure 1 shows a perspective view of the container in its closed state.

Figure 2 shows a view from the underside, with the container in its closed state.

Figure 3 shows a side view of the container in the fully open state.

Figure 4 shows a perspective view from the opposite side and observing into the case.

Referring to the drawings, Figures 1 and 2, portray the container 1 in the closed position depicting the constituent parts a case 2, a lid 3 and a base 4. In the preferred embodiment of the invention the parts may be made from plastic, and may be coloured and semi-translucent or opaque.

In the closed state, the case 2 is retained in position, symmetrically on either side of the case 2 by means of a pair of cylindrical protruding latching features 5. They possess either a spherical end face or the end face having a large radius relative to its diameter. A relatively large radius at the base of the latching features 5 would ensure that they do not snap off. As the force of closing the case 2 is applied either to case 2 or lid 3, each latching feature 5 would slightly interfere with the inside of the base 4 until they position into their corresponding holes 6 in the base 4 which would each have a slightly larger diameter than that of the latching features 5. This would hold the container 1 closed until manually opened. Relief slots (not shown) could be present in the base 4, either side of the holes 6, to relieve the area which is stressed on opening and closing, allowing a cantilevered displacement of the stressed area on interference of the boss 5.

It can be seen in figures 1 and 2 that there is one cylindrical pivoting and sliding lug 7 on each side of the lid 3. They are symmetrically opposite each other about the mid-plane of lid 1 widthways. In the closed state of the container 1, the lugs 7 are on the lower end of the sloping slot 8. The diameter of the lugs 7, are smaller than the width of the slot 8 thus allowing translation and rotation of the lid 3 about the lugs 7. There is a pivot lug 9 on each side of the case 2, symmetrically opposite each other and about its mid-plane lengthways, they are smaller in diameter than the corresponding holes 10 in the base 4 thus allowing a rotation of the case 2 about the pivot lugs 9.

Figures 3 and 4 show the container 1 in its maximum opening position. The container 1 includes a hinge feature which interconnects with the lid 3 by means of an integrated pin 11 feature on the lid 3 and an integrated receptacle boss 12 feature on the case 2. The boss 12 is a feature which protrudes lengthways along the open edge of the case 2 and has a cylindrical hole with a length and diameter suitable for the pin 11. The pin 11 is a feature which is placed along but offset from the edge of the lid 3 the offset is enough to allow the boss 12 feature to rotate about the pin 11 feature. The pin 11 assembles co-axially within the boss 12 and is a loose fit so that the lid 3 is free to rotate with the case 2 whilst they are coupled together. In other embodiments of this invention a non-integrated hinge may be used in the place of the integrated hinged features, or the boss 12 feature may be on the lid 3 and the pin 11 feature may be on the case 2.

It can be seen in the figures 3 and 4 that the pivoting and sliding lugs 7 on each side of the lid 3 are on the other extreme of the slots 8. The contents of the container 1 are fully accessible in this state where the lid 3 and case 2 interface is at approximately right angles. The opening angle is dependant on the slot 8 length, angle and form. In other embodiments of this invention, a variation in opening angle may be achieved by varying the dependant factors of the slot 8.

To open the container 1, it may be held in one hand with the thumb using the exposed edge of the cut-out 13 on the base 4 wall as the fulcrum and applying a force to the case 2 directly or through the cut-out 14 (shown in figure 2) in the base 4 perpendicular to the base 4 and in the direction tending the rotation of the case 2 in

the anticlockwise direction about the pivot lug 9 with specific reference to the view shown in Figure 3. This action would simultaneously slide and rotate the lid 3 clockwise (also referring to figure 3) throughout the travel permitted by the slot 8 length. The cut-out 13 may be any form suitable for the thumb or a finger to be placed on. The cut-out 13 is feature that would be necessary in embodiments of the invention where the case 2 and lid 3 widths are greater than that of the base 4 above the wall height of the base 4. The cut-out 14 in the base 4 may be any size and shape with the requirement that it allows a reasonable finger sized access to the face of the case 2 without significantly compromising the structure and strength of the base 4. This force may be applied by pushing a convenient finger of the holding hand through the cut-out 14 thereby permitting the single handed operation for opening. Alternatively the case 2 may be pulled directly whilst the base 4 is held in place by a hand or a fixture thereby applying the same direction of force and opening the container 1 as required. To close the container 1, a force to the case 2 in the opposite direction to that as described for the opening action is required.



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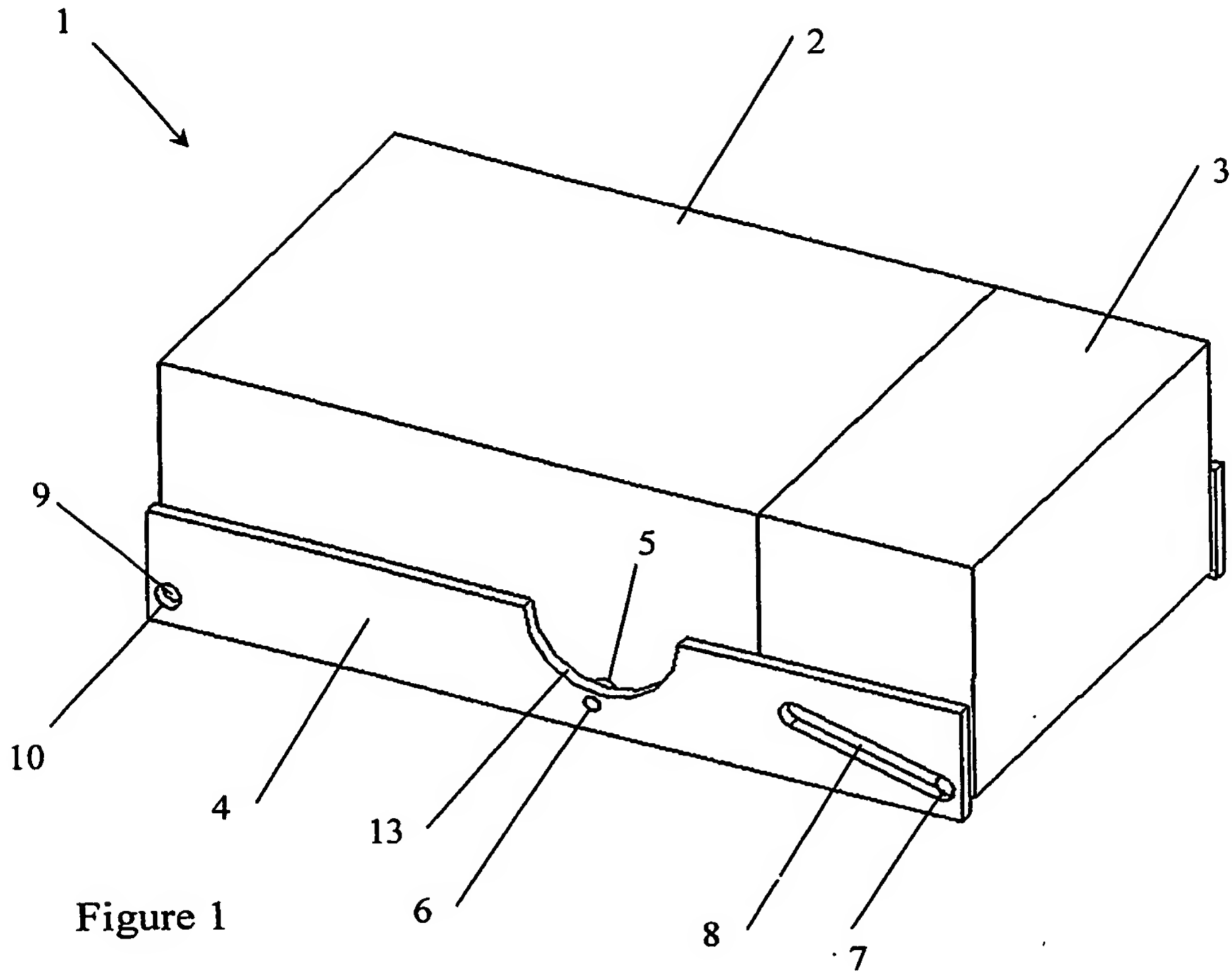


Figure 1

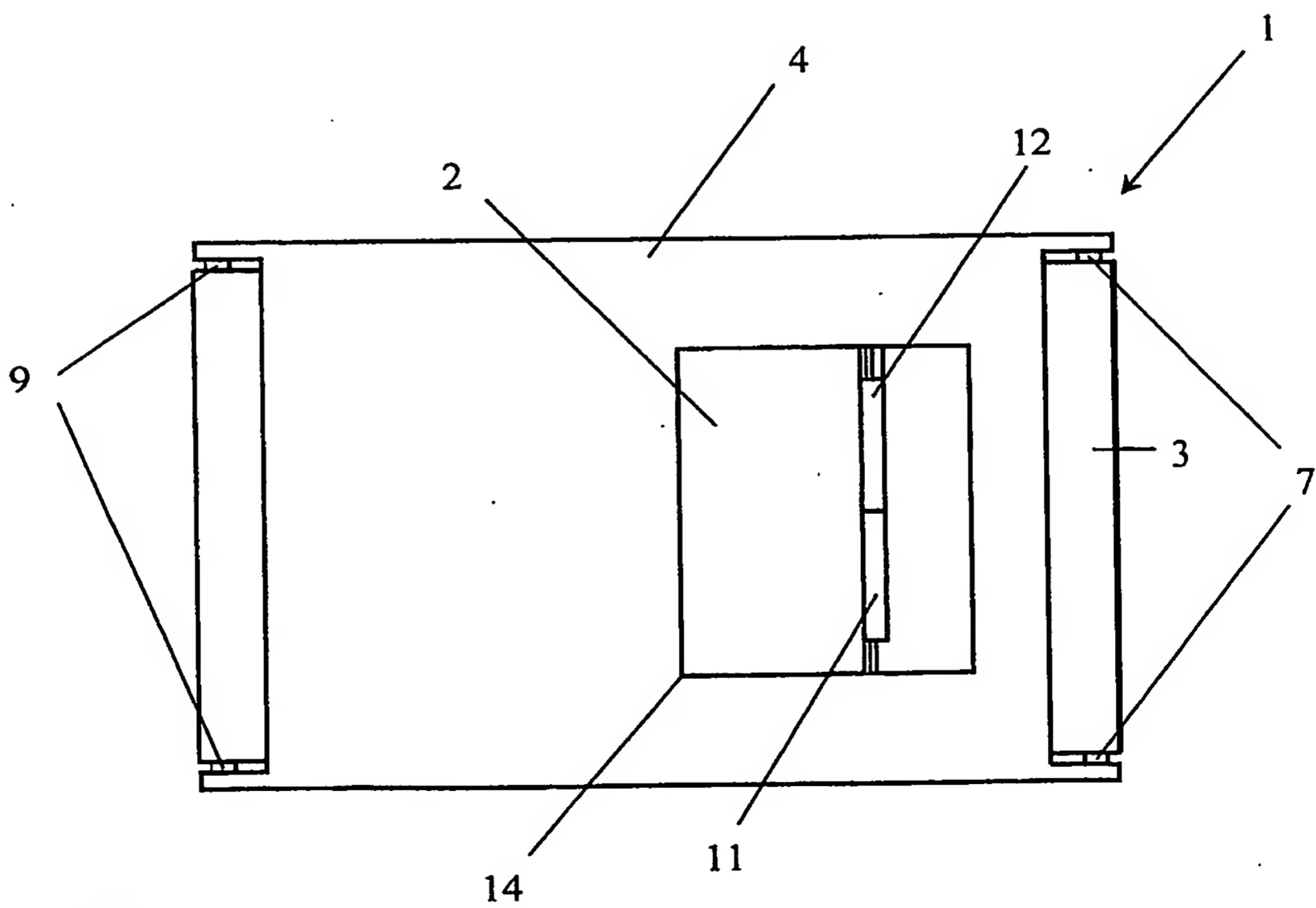


Figure 2

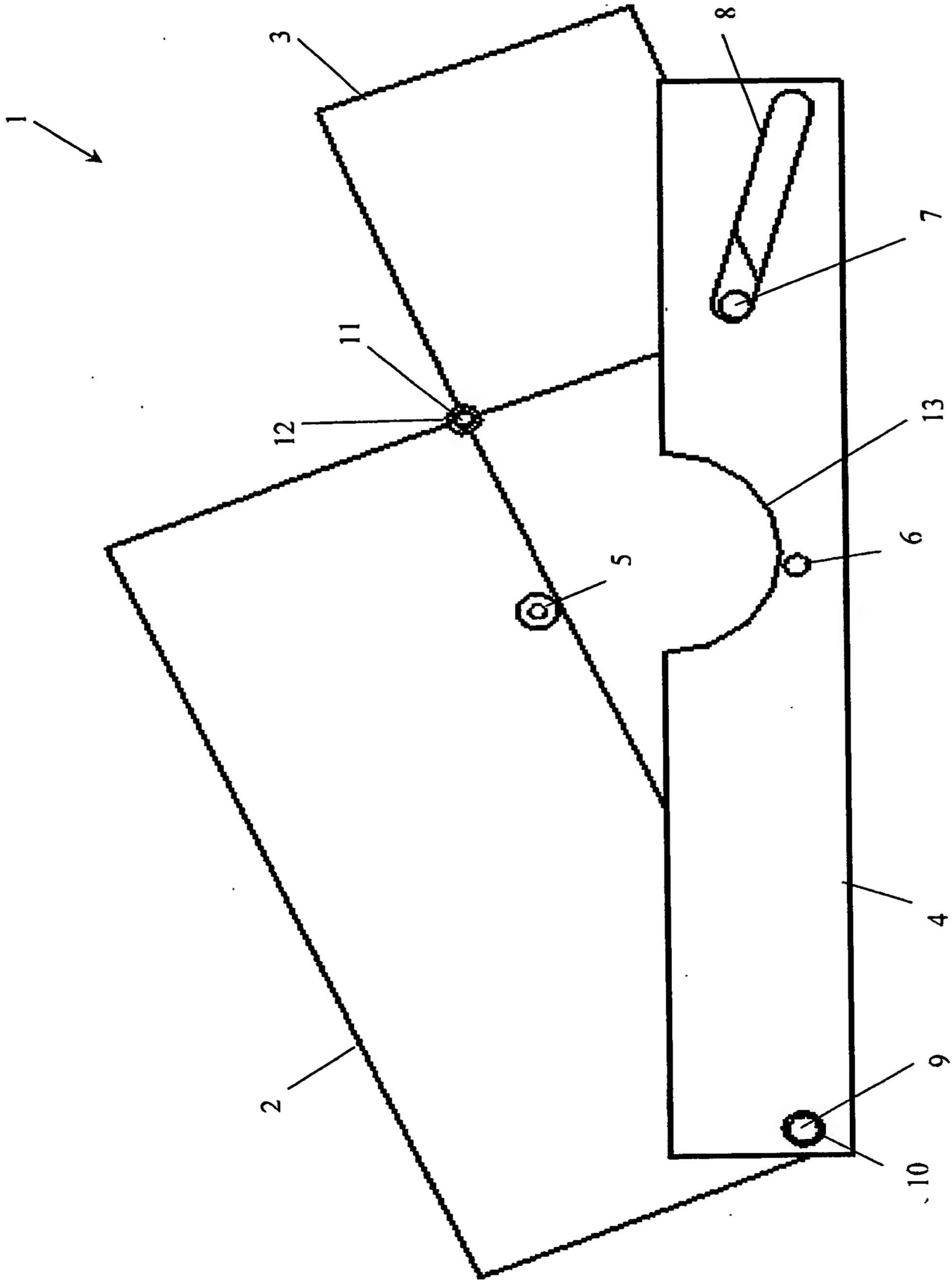


Figure 3

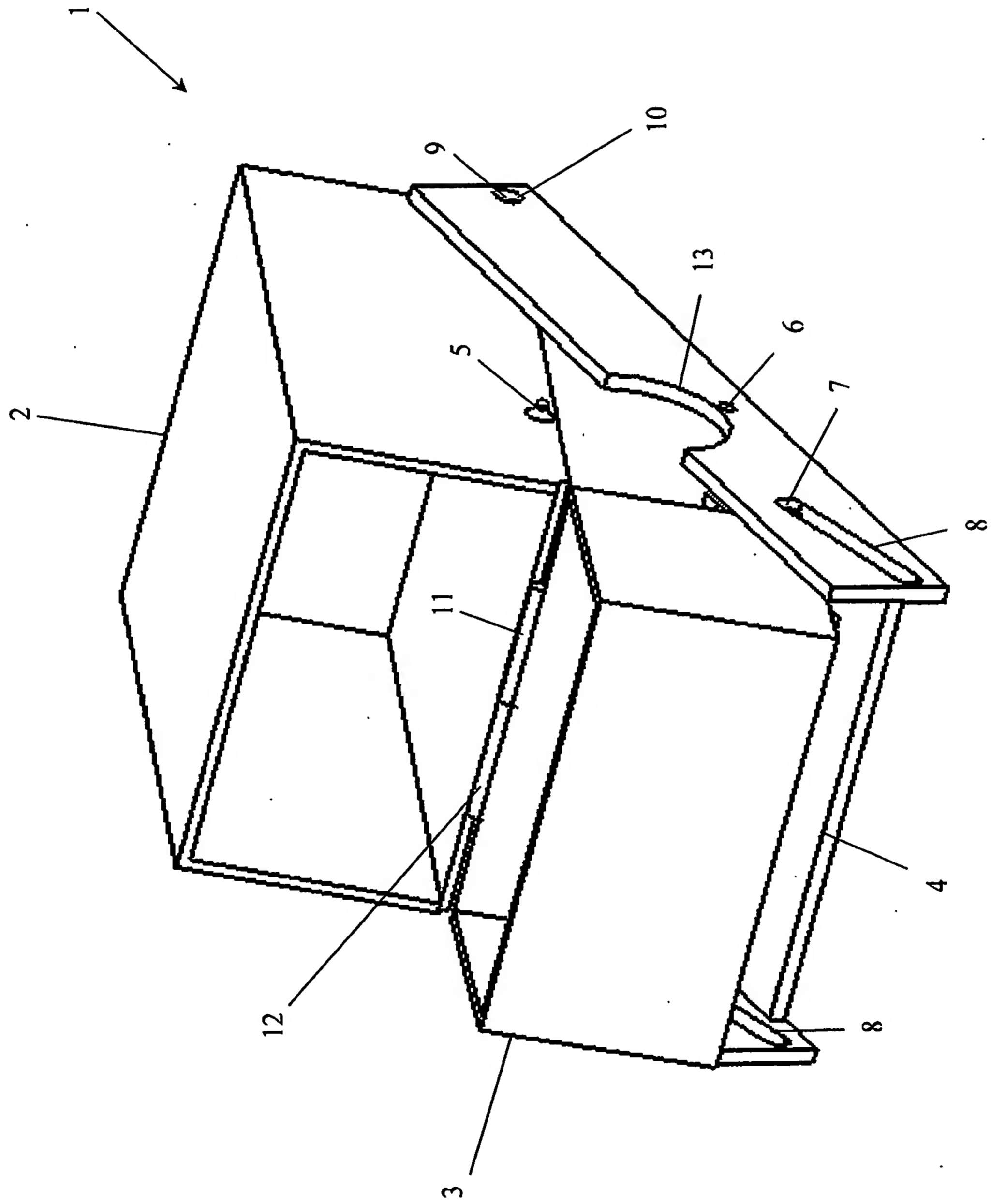


Figure 4